

Second Exam: Friday February 15 

Chapters 3 and 4. Please note that there is a class at 1 pm so you will need to finish by 12:55 pm.

Electronic Homework due R by 11:30 pm

Office hours this week: T 2-3 pm

R 1-2 pm

SL 130

Solving Limiting Reactant Problems in Solution - Precipitation Problem - I

Problem: Lead has been used as a glaze for pottery for years, and can be a problem if not fired properly in an oven, and is leachable from the pottery. Vinegar is used in leaching tests, followed by Lead precipitated as a sulfide. If 257.8 ml of a 0.0468 M solution of Lead nitrate is added to 156.00 ml of a 0.095 M solution of Sodium sulfide, what mass of solid Lead Sulfide will be formed?

Plan: It is a limiting-reactant problem because *the amounts of two reactants are given*. After writing the balanced equation, determine the limiting reactant, then calculate the moles of product. Convert moles of product to mass of the product using the molar mass.

Solution: Writing the balanced equation:



